



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**C250-C-16**  
**Job Sheet 199838**



POSITIVE  
RECALL

Part No: C250-C-16

Job Qty: 26 pcs

Part Name: Lifting Bolt



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/3/19

Job Tracking No:

Due Date: 9/9/19

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG C250-C Rev C IPP Rev. A 19.07.31 New issue (was -1100) DP Verify DD

Ship Via:

**POSITIVE RECALL**

EFFECTIVE 9/8/19 AUTH CL  
RELEASED 55 DATE SEP 10 2019  
9-89

### Bill of Materials

### Job Routing

| Op No | Operation                     | Qty    | Start Date | Due Date | Standard Setup Hrs | Run Hrs | Workcenter/Supplier    | Sign-off    |
|-------|-------------------------------|--------|------------|----------|--------------------|---------|------------------------|-------------|
| 100   | Purchasing                    | 26 pcs | 9/9/19     | 9/9/19   | 0.00               | 0.00    | Purchasing - 1         | SEP 04 2019 |
|       |                               |        |            |          |                    |         | Purchasing - 2         |             |
|       |                               |        |            |          |                    |         | Purchasing - 3         |             |
| 110   | Packaging 2-1 - Receive - B4B | 26 pcs | 9/9/19     | 9/9/19   | 0.00               | 0.00    | Packaging 2 - 1 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 2 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 3 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 5 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 4 - B4B  | SEP 04 2019 |
|       |                               |        |            |          |                    |         | Packaging 2 - 6 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 7 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 8 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 9 - B4B  |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 10 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 11 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 12 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 13 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 14 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 15 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 16 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 17 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 18 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 19 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 20 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 21 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 22 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 23 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 24 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 25 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 26 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 27 - B4B |             |
|       |                               |        |            |          |                    |         | Packaging 2 - 28 - B4B |             |

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com



Container No: S211323

Part: C250-C-16  
Job No: 199838  
Serial No/Batch: S211323  
Revision: C  
Inspector:  
Exp Date:  
Instructions:

Date: 09/04/19

Plex 9/3/19 1:23 PM Dart.Lavoie.Chantal

9/3/2019

## [Dart Hawkesbury] Job Sheet - Lavoie, Chantal

|                                                          |                             |        |        |                        |                                                 |
|----------------------------------------------------------|-----------------------------|--------|--------|------------------------|-------------------------------------------------|
|                                                          |                             |        |        | Packaging 2 - 29 - B4B |                                                 |
|                                                          |                             |        |        | Packaging 2 - 30 - B4B |                                                 |
|                                                          |                             |        |        | Packaging 2 - 31 - B4B |                                                 |
|                                                          |                             |        |        | Packaging 2 - 32 - B4B |                                                 |
|                                                          |                             |        |        | Packaging 2 - 33 - B4B |                                                 |
|                                                          |                             |        |        | Packaging 2 - 34 - B4B |                                                 |
|                                                          |                             |        |        | Packaging 2 - 35 - B4B |                                                 |
|                                                          |                             |        |        | Packaging 2 - 36 - B4B |                                                 |
| 120                                                      | QC 6                        | 26 pcs | 9/9/19 | 0.00 0.00              | QC 6 - 9                                        |
|                                                          |                             |        |        |                        | QC 6 - 68                                       |
|                                                          |                             |        |        |                        | QC 6 - 61                                       |
|                                                          |                             |        |        |                        | QC 6 - 40                                       |
|                                                          |                             |        |        |                        | QC 6 - 81                                       |
| 200                                                      | Packaging 3-1 - Stock - B4B | 26 pcs | 9/9/19 | 0.00 0.00              | Packaging 3 - 1 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 2 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 3 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 4 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 5 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 6 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 7 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 8 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 9 - B4B                           |
|                                                          |                             |        |        |                        | Packaging 3 - 10 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 11 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 12 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 13 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 14 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 15 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 16 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 17 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 18 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 19 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 20 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 21 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 22 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 23 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 24 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 25 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 26 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 27 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 28 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 29 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 30 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 31 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 32 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 33 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 34 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 35 - B4B                          |
|                                                          |                             |        |        |                        | Packaging 3 - 36 - B4B                          |
| 210                                                      | QC 21 - SA                  | 26 pcs | 9/9/19 | 0.00 0.00              | QC 21 - SA - 21                                 |
|                                                          |                             |        |        |                        | QC 21 - SA - 70                                 |
|                                                          |                             |        |        |                        | QC 21 - SA - 53                                 |
| Part Op 100 - ISSUE P/O to THREAD ALL P/O:               |                             |        |        |                        | MANUFACTURE C250-C-16 BOLT AS PER DWG C OF C IS |
| Descriptions: REQUIRED                                   |                             |        |        |                        |                                                 |
| 110 - (Pac2-Receive & Inspect for Damage & Mat'l Certs.) |                             |        |        |                        |                                                 |
| 120 - QC6- All purchased or subcontracted products       |                             |        |        |                        |                                                 |
| 200 - Identify as per dwg & Stock Location:              |                             |        |        |                        |                                                 |
| 210 - QC21- Final Inspection - Work Order Release        |                             |        |        |                        |                                                 |

DAS  
SEP 04 2019 68  
9-89

DAS  
21  
SEP 11 2019

PA 067

Plex 9/3/19 1:23 PM Dart.Lavoie.Chantal

| Job BOM                            |                |              |                |                    |
|------------------------------------|----------------|--------------|----------------|--------------------|
| Part / Item                        | Component Name | Quantity     | Operation      | Container          |
| C250-C-16P                         | Lifting Bolt   | 26 Ea (1 ea) | 100-Purchasing | S210602<br>S210603 |
| Job Allocations                    |                |              |                |                    |
| Operation                          | Component Part | Required     | Inventory      | Allocated          |
| 100-Purchasing                     | C250-C-16P     | 26           | 26             | 0                  |
| Part Specifications                |                |              |                |                    |
| Specifications could not be found. |                |              |                |                    |

Plex 9/3/19 1:23 PM Dart.Lavoie.Chantal



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB043970



**Supplier:** THR004-VC  
Canadian Threadall Ltd  
130 Turnbull Ct  
Cambridge  
ON  
N1T 1J2 Canada  
Phone: 519-576-3360 xt 123

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** POHB043970  
**PO Date:** 7/10/19  
**Due Date:** 9/10/19  
**Purchase Order Revision:** 4  
**Revision Date:** 7/22/19  
**Ship-To Contact:** Hemmerich, Steven  
Phone: 613-632-5200 Ext: 281  
shemmerich@dartaero.com

**Pynt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:** FAI Article included in this shipment. Notify Quality upon receipt.

| Items        |     |            |                  |         |                                                                                                                                           |            |         |             |                |                   |         |                  |                |
|--------------|-----|------------|------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|-------------|----------------|-------------------|---------|------------------|----------------|
| Line Item    | Job | Part       | Supplier Part No | Item No | Description                                                                                                                               | Status     | Account | Due Date    | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
| 1            |     | C250-C-16P |                  |         | Lifting Bolt as per our drawing<br>C250-C Rev C<br>Sheet 19 of 22<br><br>This bolt for FAI.<br>Price includes FAI charges<br>Lifting Bolt | Received - |         | 9/10/19     | 1 Ea           | 1 Ea              | 0 Ea    | \$339.00/Ea      | \$0.00         |
|              |     |            |                  |         |                                                                                                                                           |            |         | SEP 04 2019 |                |                   |         |                  |                |
| 2            |     | C250-C-16P |                  |         | Lifting Bolt as per our drawing<br>C250-C Rev C<br>Sheet 19 of 22                                                                         | Received - |         | 9/10/19     | 25 Ea          | 25 Ea             | 0 Ea    | \$139.00/Ea      | \$0.00         |
|              |     |            |                  |         |                                                                                                                                           |            |         | SEP 04 2019 |                |                   |         |                  |                |
| Grand Total: |     |            |                  |         |                                                                                                                                           |            |         |             |                |                   |         | \$0.00           |                |

### Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

### Procurement Quality Clauses

#### A005 RIGHT OF ENTRY

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, DOCUMENTATION & SAMPLE SENT TO DART AEROSPACE

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM (In Process)

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

#### A049 SUPPLIER AWARENESS



Canadian Threadall Limited  
130 Turnbull Court  
Cambridge, ON  
Canada, N1T 1J2  
TEL: 519-576-3360  
FAX: 519-576-3991

Page 1 of 1

## Pack Slip

Pack Slip No 20107428

Printed Date Aug 20, 2019

Sold To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K6A 1K7

Ship To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K6A 1K7

| Req. Ship Date | Shipped Via | BOL No. | Customer Po No | Sales Order No | Ship Terms |
|----------------|-------------|---------|----------------|----------------|------------|
| Aug 26, 2019   |             |         | IHB043970-RE   | 2014615        |            |

| Item                  | Customer Part No | Order Qty | Shipped Qty | UOM | Description                                                                                                                   |
|-----------------------|------------------|-----------|-------------|-----|-------------------------------------------------------------------------------------------------------------------------------|
| <del>XXXXXXXXXX</del> | C250-C-16        | 25        | 25          | EA  | 1-1/2" - 6 X 5.00" 4140 HEX BOLT, 33/38 Rc A354 GR. BD, THR- 3 50"; C/W 0.313" HOLE, BLACK OXIDE; PART# C250-C-16, DWG# 4869. |
| FIRST ARTICLE         |                  | 1         | 1           | EA  | TO CHARGE FOR FIRST ARTICLE INSPECTION                                                                                        |

  
Shipper

Truck Driver



## Canadian Threadall Limited

156 Roger Street, Waterloo, ON N2J 1A9

P: 519.576.3360 F: 519.576.3991 www.threadall.com

### Letter of Compliance

|                 |                             |                       |                        |
|-----------------|-----------------------------|-----------------------|------------------------|
| <b>Sold to:</b> | <b>DART AEROSPACE LTD.</b>  | <b>Date:</b>          | <b>AUGUST 28, 2019</b> |
|                 | <b>1270 Aberdeen Street</b> | <b>Invoice Date</b>   | <b>AUGUST 26, 2019</b> |
|                 | <b>Hawkesbury, ON</b>       | <b>CTL Invoice #</b>  | <b>20107814</b>        |
|                 | <b>K6A 1K7</b>              | <b>CTL W/O #:</b>     | <b>2015306</b>         |
|                 | <b>Canada</b>               | <b>Customer P.O.:</b> | <b>POHB043970-R2</b> ✓ |

**Description of Raw Material**  
**Description of Finished Item:**

**2.500" RD 4140 ANNEALED BAR**

**1-1/2" - 6 X 9.00" 4140 HEX LIFTING BOLT; 33/38 Rc A354  
GR. BD; THR= 3.50"; C/W 0.313" HOLE; BLACK OXIDE;  
PART# C-250-C-16 DWG# 4869; CUSTOMER DWG# C250-C -  
Rev C Sheet 19** ✓

**Item #: 1                      Quantity: 26                      Lot or Serial #: A511** ✓

**We hereby certify that the attached is a true copy of the data furnished to us by the Producing Mill and/or Material Supplier.**

**Robert DeGanis**

**Quality Assurance Dept.  
Canadian Threadall Limited**



Canadian Threadall Limited  
130 Turnbull Court  
Cambridge, ON  
Canada, N1T 1J2  
TEL. 519-576-3360  
FAX 519-576-3991

Page 1 of 1

## Pack Slip

Pack Slip No 20107428

Printed Date Aug 20, 2019

Sold To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K6A 1K7

Ship To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K6A 1K7

| Req. Ship Date | Shipped Via | BOL No. | Customer Po No | Sales Order No | Ship Terms |
|----------------|-------------|---------|----------------|----------------|------------|
| Aug 26, 2019   |             |         | HHB043970-RE   | 2014615        |            |

| Item              | Customer Part No | Order Qty | Shipped Qty | UOM | Description                                                                                                                   |
|-------------------|------------------|-----------|-------------|-----|-------------------------------------------------------------------------------------------------------------------------------|
| DA#PC250-1120P_BO |                  | 25        | ✓ 26        | EA  | 1-1/2" - 6 X 9.00" 1140 HEX BOLT, 33/38 Rc A354 GR. BD, THR= 3.50", C/W 0.313" HOLE, BLACK OXIDE, PART# PC250-1120P DWG# 4868 |
| FIRST ARTICLE     |                  | 1         | 1           | EA  | TO CHARGE FOR FIRST ARTICLE INSPECTION                                                                                        |

P- 331950951177

Shipper

Truck Driver



Canadian Threadall Limited  
130 Turnbull Court  
Cambridge, ON  
Canada, N1T 1J2  
TEL: 519-576-3360  
FAX: 519-576-3991

Page 1 of 1

9 pcs

## Pack Slip

Pack Slip No 20107428

Printed Date Aug 20, 2019

Sold To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K6A 1K7

Ship To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K6A 1K7

| Req. Ship Date | Shipped Via | BOL No. | Customer Po No | Sales Order No | Ship Terms |
|----------------|-------------|---------|----------------|----------------|------------|
| Aug 26, 2019   |             |         | HB043970-RE    | 2014615        |            |

| Item              | Customer Part No | Order Qty. | Shipped Qty | UOM | Description                                                                                                                   |
|-------------------|------------------|------------|-------------|-----|-------------------------------------------------------------------------------------------------------------------------------|
| DA#PC250-1120P_BO |                  | 25         | 26          | EA  | 1-1/2" - 6 X 9.00" 4140 HEX BOLT, 33/36 Rc A354 GR. BD, THR= 3.50", C/W 0.313" HOLE, BLACK OXIDE, PART# PC250-1120P DWG# 4869 |
| FIRST ARTICLE     |                  | 1          | 1           | EA  | TO CHARGE FOR FIRST ARTICLE INSPECTION                                                                                        |

P-3319509 51169

Shipper

Truck Driver





Canadian Threadall Limited  
130 Turnbull Court  
Cambridge, ON  
Canada, N1T 1J2  
TEL: 519-576-3360  
FAX: 519-576-3991

Page 1 of 1

## Pack Slip

Pack Slip No 20107428

Printed Date Aug 20, 2019

Sold To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K8A 1K7

Ship To : DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY, ON  
CANADA, K8A 1K7

| Req. Ship Date | Shipped Via | BOL No. | Customer Po No | Sales Order No | Ship Terms |
|----------------|-------------|---------|----------------|----------------|------------|
| Aug 26, 2019   |             |         | HB043970-RE    | 2014615        |            |

| Item              | Customer Part No | Order Qty. | Shipped Qty | UOM | Description                                                                                                                   |
|-------------------|------------------|------------|-------------|-----|-------------------------------------------------------------------------------------------------------------------------------|
| DA#PC250-1120P_BO |                  | 25         | 26          | EA  | 1-1/2" - 6 X 9 00" 4140 HEX BOLT, 33/38 Rc A354 GR. BD, THR= 3 50", C/W 0.313" HOLE; BLACK OXIDE, PART# PC250-1120P DWG# 4869 |
| FIRST ARTICLE     |                  | 1          | 1           | EA  | TO CHARGE FOR FIRST ARTICLE INSPECTION                                                                                        |

P - 331950851151

Shipper

Truck Driver

**Form 1: Part Number Accountability**[illegible]

# SAE AS9102 First Article Inspection Form

Form 03: Characteristic Accountability, Verification and Compatibility Evaluation

Sheet 01 of 03

| 1. Part Number:<br>C250-C-16                                                                                                   |                       | 2. Part Name:<br>LIFTING BOLT |                | 3. Serial Number          |                      | 4. FAI Report<br>DA1200-01-2019 |                               |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------|----------------|---------------------------|----------------------|---------------------------------|-------------------------------|
| Characteristic Accountability                                                                                                  |                       |                               |                | Inspection / Test Results |                      |                                 |                               |
| 5. Char No.                                                                                                                    | 6. Reference Location | 7. Characteristic Designator  | 8. Requirement | 9. Results                | 10. Designed Tooling | 11. Non-Conformance Number      | 14. Remarks                   |
| Sample 1                                                                                                                       |                       |                               |                |                           |                      |                                 |                               |
| 1                                                                                                                              | 1                     |                               | 9.00 ± 0.01"   | 8.99                      |                      |                                 | VERNIER                       |
| 2                                                                                                                              | 2                     |                               | 5.50 - 4.67    | 5.4425                    |                      |                                 | VERNIER                       |
| 3                                                                                                                              | 3                     |                               | 0.867 ± 0.005" | 0.8635                    |                      |                                 | VERNIER                       |
| 4                                                                                                                              | 4                     |                               | 0.313 ± 0.005" | 0.3090                    |                      |                                 | PIN GAUGE                     |
| 5                                                                                                                              | 5                     | O.D threads                   | 1.500 ± 0.005" | 1.4931                    |                      |                                 | MICROMETER                    |
| 6                                                                                                                              | 5a                    | P.D over .092 wire            | 1.512 - 1.520  | 1.5170                    |                      |                                 | MICROMETER WITH 3 WIRE METHOD |
| 7                                                                                                                              | 6                     |                               | 1.500 ± 0.005" | 1.5010                    |                      |                                 | MICROMETER                    |
| 8                                                                                                                              | 7                     |                               | 0.09 - 0.03    | 0.0393                    |                      |                                 | RADIUS GAUGE                  |
| 9                                                                                                                              | 8                     |                               | 30°            | 35°                       |                      | SEE ATTACHED                    | BEVEL GAUGE                   |
| 10                                                                                                                             | 9                     |                               | 1.036 - 0.902  | 0.9600                    |                      |                                 | VERNIER                       |
| 11                                                                                                                             | 10                    |                               | 2.225 - 2.175  | 2.1860                    |                      |                                 | VERNIER                       |
| Sample 2                                                                                                                       |                       |                               |                |                           |                      |                                 |                               |
| 13                                                                                                                             | 1                     |                               | 9.00 ± 0.01"   | 8.9985                    |                      |                                 | VERNIER                       |
| 14                                                                                                                             | 2                     |                               | 5.50 - 4.67    | 5.4425                    |                      |                                 | VERNIER                       |
| 15                                                                                                                             | 3                     |                               | 0.867 ± 0.005" | 0.8620                    |                      |                                 | VERNIER                       |
| 16                                                                                                                             | 4                     |                               | 0.313 ± 0.005" | 0.3090                    |                      |                                 | PIN GAUGE                     |
| 17                                                                                                                             | 5                     | O.D threads                   | 1.500 ± 0.005" | 1.4920                    |                      |                                 | MICROMETER                    |
| 18                                                                                                                             | 5a                    | P.D over .092 wire            | 1.512 - 1.520  | 1.5170                    |                      |                                 | MICROMETER WITH 3 WIRE METHOD |
| 19                                                                                                                             | 6                     |                               | 1.500 ± 0.005" | 1.5005                    |                      |                                 | MICROMETER                    |
| 20                                                                                                                             | 7                     |                               | 0.09 - 0.03    | 0.0393                    |                      |                                 | RADIUS GAUGE                  |
| 21                                                                                                                             | 8                     |                               | 30°            | 35°                       |                      | SEE ATTACHED                    | BEVEL GAUGE                   |
| 22                                                                                                                             | 9                     |                               | 1.036 - 0.902  | 0.9530                    |                      |                                 | VERNIER                       |
| 23                                                                                                                             | 10                    |                               | 2.225 - 2.175  | 2.1860                    |                      |                                 | VERNIER                       |
| The signature indicates that all characteristics are for; meet drawing requirements or are properly documented for disposition |                       |                               |                |                           |                      |                                 |                               |
| 12. Prepared By<br>Masood Raza                                                                                                 |                       |                               |                | 13. Date<br>Aug 21, 2019  |                      |                                 |                               |

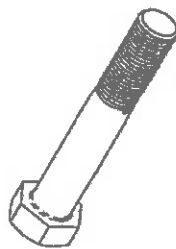
# SAE AS9102 First Article Inspection Form

Form 03: Characteristic Accountability, Verification and Compatibility Evaluation

Sheet 02 of 03

| 1. Part Number:<br>C250-C-16                                                                                                   |                       | 2. Part Name:<br>LIFTING BOLT |                | 3. Serial Number          |                      | 4. FAI Report CTL-<br>DA1200-01-2019 |                               |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------|----------------|---------------------------|----------------------|--------------------------------------|-------------------------------|
| Characteristic Accountability                                                                                                  |                       |                               |                | Inspection / Test Results |                      |                                      |                               |
| 5. Char No.                                                                                                                    | 6. Reference Location | 7. Characteristic Designator  | 8. Requirement | 9. Results                | 10. Designed Tooling | 11. Non-Conformance Number           | 14. Remarks                   |
| <b>Sample 3</b>                                                                                                                |                       |                               |                |                           |                      |                                      |                               |
| 24                                                                                                                             | 1                     |                               | 9.00 ± 0.01"   | 8.9985                    |                      |                                      | VERNIER                       |
| 25                                                                                                                             | 2                     |                               | 5.50 - 4.67    | 5.4310                    |                      |                                      | VERNIER                       |
| 26                                                                                                                             | 3                     |                               | 0.867 ± 0.005" | 0.8680                    |                      |                                      | VERNIER                       |
| 27                                                                                                                             | 4                     |                               | 0.313 ± 0.005" | 0.3100                    |                      |                                      | PIN GAUGE                     |
| 28                                                                                                                             | 5                     | O.D threads                   | 1.500 ± 0.005" | 1.4930                    |                      |                                      | MICROMETER                    |
| 29                                                                                                                             | 5a                    | P D over .092 wire            | 1.512 - 1.520  | 1.5187                    |                      |                                      | MICROMETER WITH 3 WIRE METHOD |
| 30                                                                                                                             | 6                     |                               | 1.500 ± 0.005" | 1.5004                    |                      |                                      | MICROMETER                    |
| 31                                                                                                                             | 7                     |                               | 0.09 - 0.03    | 0.0393                    |                      |                                      | RADIUS GAUGE                  |
| 32                                                                                                                             | 8                     |                               | 30°            | 35°                       | SEE ATTACHED         |                                      | BEVEL GAUGE                   |
| 33                                                                                                                             | 9                     |                               | 1.036 - 0.902  | 0.9540                    |                      |                                      | VERNIER                       |
| 34                                                                                                                             | 10                    |                               | 2.225 - 2.175  | 2.1870                    |                      |                                      | VERNIER                       |
| <b>Sample 4</b>                                                                                                                |                       |                               |                |                           |                      |                                      |                               |
| 36                                                                                                                             | 1                     |                               | 9.00 ± 0.01"   | 8.995                     |                      |                                      | VERNIER                       |
| 37                                                                                                                             | 2                     |                               | 5.50 - 4.67    | 5.4560                    |                      |                                      | VERNIER                       |
| 38                                                                                                                             | 3                     |                               | 0.867 ± 0.005" | 0.8650                    |                      |                                      | VERNIER                       |
| 39                                                                                                                             | 4                     |                               | 0.313 ± 0.005" | 0.3100                    |                      |                                      | PIN GAUGE                     |
| 40                                                                                                                             | 5                     | O.D threads                   | 1.500 ± 0.005" | 1.4920                    |                      |                                      | MICROMETER                    |
| 41                                                                                                                             | 5a                    | P D over .092 wire            | 1.512 - 1.520  | 1.5170                    |                      |                                      | MICROMETER WITH 3 WIRE METHOD |
| 42                                                                                                                             | 6                     |                               | 1.500 ± 0.005" | 1.5000                    |                      |                                      | MICROMETER                    |
| 43                                                                                                                             | 7                     |                               | 0.09 - 0.03    | 0.0393                    |                      |                                      | RADIUS GAUGE                  |
| 44                                                                                                                             | 8                     |                               | 30°            | 35°                       | SEE ATTACHED         |                                      | BEVEL GAUGE                   |
| 45                                                                                                                             | 9                     |                               | 1.036 - 0.902  | 0.9545                    |                      |                                      | VERNIER                       |
| 46                                                                                                                             | 10                    |                               | 2.225 - 2.175  | 2.1880                    |                      |                                      | VERNIER                       |
| The signature indicates that all characteristics are for; meet drawing requirements or are properly documented for disposition |                       |                               |                |                           |                      |                                      |                               |
| 12. Prepared By<br>Masood Raza                                                                                                 |                       |                               |                | 13. Date<br>Aug 21, 2019  |                      |                                      |                               |

Dug. # 4869



# CERTIFICATE OF MATERIAL TEST REPORTS

|                                                                                                        |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
|--------------------------------------------------------------------------------------------------------|----------|----------------------------|------|-----------|-----|------------------|-----|----------------------|------|----------------------------------------------------------------------------------------------------|-----------|------------|-----|-----------------|----|-----|-----|-----|----|-----|----|-----|-----|
| <b>H-A Industries</b><br>A Division of A. M. Castle & Co.<br>4527 Columbia Avenue<br>Hammond, IN 46327 |          |                            |      |           |     |                  |     |                      |      | <b>Customer:</b><br>A. M. Castle & Co.<br>1420 Kensington Road<br>Suite 220<br>Oak Brook, IL 60523 |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| MANUFACTURER (MILL)                                                                                    |          |                            |      |           |     |                  |     |                      |      | CUST. ORDER NO.                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| TIMKENSTEEL CORPORATION                                                                                |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| IC                                                                                                     | HEAT NO. | MECHANICAL ID              |      | ORDER NO. |     | SHIP QUANTITY    |     |                      |      |                                                                                                    | DATE      |            |     |                 |    |     |     |     |    |     |    |     |     |
| 2313                                                                                                   | W5132    | C6668                      |      | 12113867  |     | 4552             |     |                      |      |                                                                                                    | 30-MAY-19 |            |     |                 |    |     |     |     |    |     |    |     |     |
| DESCRIPTION OF MATERIAL                                                                                |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| 2 5000.RD.4140.ALLOY.CF.ANN.120.0000-156.0000                                                          |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| CHEMICAL ANALYSIS %                                                                                    |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| C                                                                                                      | MN       | P                          | S    | SI        | CU  | NI               | CR  | MO                   | AL   |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| .41                                                                                                    | .95      | .009                       | .020 | .24       | .24 | .16              | .98 | .20                  | .024 |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| CA                                                                                                     |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| JOMINY HARDENABILITY Rc                                                                                |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| 1                                                                                                      | 2        | 3                          | 4    | 5         | 6   | 7                | 8   | 9                    | 10   | 11                                                                                                 | 12        | 13         | 14  | 15              | 16 | 18  | 20  | 22  | 24 | 26  | 28 | 30  | 32  |
| .58                                                                                                    | .57      | .56                        | .55  | .55       | .55 | .54              | .53 | .53                  | .53  |                                                                                                    | .50       |            | .47 |                 |    | .45 | .43 | .39 |    | .37 |    | .37 | .36 |
| METALLURGICAL                                                                                          |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
|                                                                                                        |          |                            |      |           |     | NAFTA<br>YES     |     | GRAIN SIZE<br>5      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| CONTINUOUS<br>CAST<br>YES                                                                              |          | REDUCTION<br>RATIO<br>36.2 |      |           |     | FROM IC<br>16609 |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| COUNTRY OF<br>MANUFACTURE<br>United States                                                             |          | COUNTRY<br>OF MELT<br>US   |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| HEAT TREATMENT                                                                                         |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
|                                                                                                        |          |                            |      |           |     |                  |     | % LP<br>ANNEAL<br>85 |      | DECARB<br>(In)<br>0                                                                                |           | HRS<br>5.7 |     | TEMP °F<br>1550 |    |     |     |     |    |     |    |     |     |
| HARDNESS                                                                                               |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| Location                                                                                               | Type     |                            |      |           |     | Type             |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| SURF                                                                                                   | HBW      | 199                        |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| CONFORMANT TO SPECIFICATIONS                                                                           |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| ASTM A29-16                                                                                            |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| ASTM A108-18                                                                                           |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| ASTM A304-16                                                                                           |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |
| UNS# G41400                                                                                            |          |                            |      |           |     |                  |     |                      |      |                                                                                                    |           |            |     |                 |    |     |     |     |    |     |    |     |     |

H-A INDUSTRIES CERTIFIES THAT APPROPRIATE INFORMATION IS TAKEN FROM TEST REPORTS FURNISHED TO US BY OUR SUPPLIER AND WHICH ARE ON FILE IN OUR OFFICE. H-A INDUSTRIES CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN ACCORDANCE WITH METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS. THE RESULTS OF INSPECTION AND TESTING CONFORM TO THE SPECIFICATIONS LISTED INCLUDING ASTM A370 LATEST REVISION AND EN 10204-2004 3.1.

H-A CERTIFIES THAT THE METAL WHICH IS THE SUBJECT OF THIS CERTIFICATION IS MERCURY FREE AND WAS NOT EXPOSED TO ANY RADIOACTIVE SOURCE MATERIAL DOES NOT CONTAIN ANY POLYBROMINATED BIPHENYLS (PBB) OR POLYBROMINATED DIPHENYL ETHERS (PBDE). NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHABLE AS A FELONY UNDER FEDERAL STATUTE.

NAME: JAN L. CARUSO

TITLE: MANAGER OF TECHNICAL SERVICES

SIGNATURE:





REF No      G957832      : Issue    1  
Page        2 of 2

Tested by      Chris Hernandez & Jim Cong

  
.....  
Roger Graham  
General Manager  
For and on authority of  
Element Materials Technology

**INDUSTRIAL PROCESSING  
KREBSZ ELECTROPLATING LIMITED**

227 Avenue Road, Cambridge, Ontario N1R 71  
P.O Box 1117, Cambridge, Ontario N1R 5Y2  
Phone: (519) 621-2571  
Fax: (519) 621-2881  
E-mail: [Indpro@golden.net](mailto:Indpro@golden.net)

**Warranty Certificate**

**To:** *Canadian Threadall Ltd.  
130 Turnbull Court  
Cambridge, Ontario  
N1T 1J2*

**Date:** *Aug. 19, 2019*

**P.O. Number:** *2013698*

**Order Number:** *212020*

| <b>Quantity</b> | <b>Part Number</b>                    | <b>Description</b> | <b>Specification</b>                                                                                           |
|-----------------|---------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------|
| 26 pcs.         | CTL Black Oxide Hex Bolts 1 1/2" x 9" |                    | Black Oxide per Mil-C-13924 Class 1<br>- thin layer oil/CPC per Mil-PRF-16173<br>Grade 3, Class 1, wipe excess |

***We certify that the items as listed on this certificate have been processed, and finished,  
to conform to the requirements detailed in the drawing or purchase order.  
Where applicable, test and analytical results are pending.***

***For and on behalf of  
Industrial Processing***

  
\_\_\_\_\_  
**Quality Assurance Mgr. or designate**



# DART SUPPLIER NONCONFORMANCE REPORT



Supplier Name: CANADIAN THREADALL LTD  
 Job / PO# POHB043970-REV2  
 Part Number: C250-C-16  
 Description: 1-1/2" - 6 X 9.00" 4140 LIFTING BOLT  
 QTY: 26

Reject QTY: 26  
 Dart Supplied: Yes/ No  
 Material: Yes/ No  
 Pictures: Yes/ No  
 Attached: Yes/ No

Work Order #: 2015306  
 Date: 06-Aug-19  
 is the Part Identified: Yes/ No

## DESCRIPTION OF NONCONFORMANCE

| Item                                                                  | Qty |                                                                                                                                                                  |
|-----------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                                     | 26  | Dimension 8 as shown in the attached marked-up drawing, chamfer angle is specified as 30 deg $\pm$ 1 deg. Reading on the part is 35° (Ref. PART DRAWING-04-2019) |
| IMPACT EVALUATION & DISPOSITION PROPOSAL                              |     |                                                                                                                                                                  |
| Item Ref.                                                             |     | Recommended for acceptance                                                                                                                                       |
| 1                                                                     |     |                                                                                                                                                                  |
| CAUSE OF NONCONFORMANCE                                               |     |                                                                                                                                                                  |
| Item Ref.                                                             |     | Machinist error                                                                                                                                                  |
| 1                                                                     |     |                                                                                                                                                                  |
| CORRECTIVE ACTION                                                     |     |                                                                                                                                                                  |
| Item Ref.                                                             |     | Have spoken with production supervisory staff to ensure employees are producing to spec sheet.                                                                   |
| 1                                                                     |     |                                                                                                                                                                  |
| PART / CUSTOMER DISPOSITION ( TO BE FILLED IN BY DART)                |     |                                                                                                                                                                  |
| Item Ref.                                                             |     |                                                                                                                                                                  |
| Parts accepted with Non-Conformance                                   |     |                                                                                                                                                                  |
| CMS ASIDE IS NOT CHECKED. THIS DISCREPANCY IS ACCEPTABLE PER SEP 3/19 |     |                                                                                                                                                                  |

Supplier QC/QC: Teresa Sperry  
 Dart Inspector/ SQA: Holly Zhu

Date: AUG 06 2019  
 Date: Sep 3, 2019 DART NCR#

By: \_\_\_\_\_



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB043970



**Supplier:** THR004-VC  
Canadian Threadall Ltd  
130 Turnbull Ct  
Cambridge  
ON  
N1T 1J2 Canada  
Phone: 519-576-3360 xt 123

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** POHB043970  
**PO Date:** 7/10/19  
**Due Date:** 9/10/19  
**Purchase Order Revision:** 4  
**Revision Date:** 7/22/19  
**Ship-To Contact:** Hemmerich, Steven  
Phone: 613-632-5200 Ext: 281  
shemmerich@dartaero.com

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:** FAI Article included in this shipment. Notify Quality upon receipt.

### Items

| Line Item           | Job | Part       | Supplier Part No | Item No | Description                                                                                                                               | Status   | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|---------------------|-----|------------|------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|----------|----------------|-------------------|---------|------------------|----------------|
| 1                   |     | C250-C-16P |                  |         | Lifting Bolt as per our drawing<br>C250-C Rev C<br>Sheet 19 of 22<br><br>This bolt for FAI.<br>Price includes FAI charges<br>Lifting Bolt | Received | -       | 9/10/19  | 1 Ea           | 1 Ea              | 0 Ea    | \$339.00/Ea      | \$0.00         |
| 2                   |     | C250-C-16P |                  |         | Lifting Bolt as per<br>C250-C Rev C<br>Sheet 19 of 22                                                                                     | Received | -       | 9/10/19  | 25 Ea          | 25 Ea             | 0 Ea    | \$139.00/Ea      | \$0.00         |
| <b>Grand Total:</b> |     |            |                  |         |                                                                                                                                           |          |         |          |                |                   |         |                  | <b>\$0.00</b>  |

### Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

### Procurement Quality Clauses

A005 RIGHT OF ENTRY

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, DOCUMENTATION & SAMPLE SENT TO DART AEROSPACE

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM (In Process)

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS